VIRGINIA WILDLIFE

OCTOBER 2008

FOUR DOLLARS

Bob Duncan
Executive Director

The agency has just come through a major undertaking that began over 15 months ago when our board approved a formal study of hound-hunting in Virginia. Posted on our Web site (www.HuntFishVA.com) are recommendations made by the study's Stakeholder Advisory Committee (SAC)—a group of thoughtful, highly dedicated citizens with diverse backgrounds who agreed to serve fellow Virginians in this process. Their recommendations are the result of a series of discussions based on written comments received and facilitated meetings held across the Commonwealth about issues related to hunting with hounds.

I believe the methods employed throughout the study have been open and inclusive. SAC members have devoted countless hours to a difficult, often polarizing assignment. Advisory committee members and facilitators from Virginia Tech upheld the highest standards of professionalism and grace under fire—when it would have been easy to call it quits at many points along the way. Regardless of one's position on this matter, they deserve our respect and gratitude.

I'd like to touch upon something else here—to address why we undertook this work and why the process was so carefully implemented. The decision to study hound-hunting was based not on the number of complaints, but on the nature of the complaints received. The tenor of those calls was one of great concern, as we viewed public dialogue becoming more and more confrontational. We were also acutely aware that hound-hunting activity has become an issue in other states: Florida, Georgia, South Carolina, and now, North Carolina. It was only a matter of time before it reached fever-pitch in Virginia.

At the crux of the hound-hunting issue we find one thread in a larger fabric unraveling across rural America. That thread is the loss of large tracts of land and owners willing to lease those lands to hunt clubs and other hunting interests. This is of great concern to us, of course, because a large percentage of traditional hound-hunting activity in Virginia has been made possible on those very lands.

As you review the recommendations made by the committee, please consider that every position was thoroughly vetted and each word agreed upon after many hours of deliberation. But by identifying the issues, by listing them out, and by reaching consensus where they could, I believe the committee has brought clarity to the matter at hand.

We understand that hound-hunting is more than a sport to Virginians. It is deeply embedded in our cultural history and part of our shared natural heritage. We always intended that the hound study would help us "find our way," and I believe that Virginians are uniquely qualified to rise to this challenge.

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish and harvest game as provided for in the Constitution of Virginia; To promote safety for persons and property in connection with boating, hunting and fishing; To provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing and boating opportunities.

Dedicated to the Conservation of Virginia's Wildlife and Natural Resources

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About the cover:
The bobwhite quail represents, for many, the prince of upland game birds. In this issue of the magazine we explore what conservationists and biologists are doing statewide to re-establish critical habitat, desperately needed for the bird's return.
©Maslowski Photo

VIRGINIA WILDLIFE

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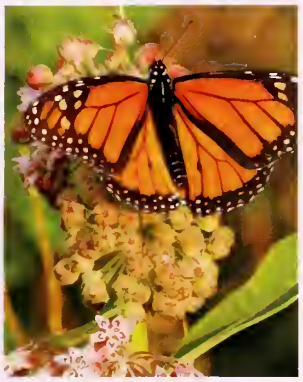

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©John Ford

"Bring

Conservationists are rising to the challenge of preserving habitat for bobwhite quail.

by Tee Clarkson
photos by Dwight Dyke

Ten-month-old Llewellin setter Betsy and her partner Pearl, a German shorthair, cut through thick cover, quartering back into what little wind there is. It's October and it's hot. Scenting conditions are tough. They have been on some birds today, locking intermittently on a single quail here, a pair there, all of them pen raised. There is little chance of marking a wild covey on this hunting preserve as they search the fields and the edges of the woods. Steve Bebout, who works with Quail Forever in Virginia, walks steadily behind the two dogs. Steve

Pearl, a German shorthair, strikes a classic point as she takes wind of a quail holding tight to cover.

Back Bob"

Where quail are concerned, tidy is not better. Here, quail take advantage of corn and other forage left behind by the combine.

grew up hunting wild quail in northeast Tennessee as a youngster. Thirty years have passed since then, and Steve currently resides in Franklin County between Roanoke and Martinsville.

Like most states throughout the Southeast, Virginia's quail numbers have been in a state of decline for the last several decades. Steve hopes to reverse this trend by working with others to implement quail habitat projects in Virginia. He hopes that in a decade, maybe even a few years, he might take a similar walk behind his dogs and bump a few wild coveys.

"Admittedly," Steve says, "we know it's going to take a long time. It's not like we can start the program and then hunt wild quail the next year. We're looking long term."

Groups like Quail Forever and Quail Unlimited focus on improving natural habitat. It is no secret that modern farming practices have added to the game bird's decline along with a growing human population and increasing urban sprawl. Quail Forever believes in using federal programs to aid in improving habitat similar to the way its parent organization, Pheasants Forever, has taken advantage of the Conservation Reserve Program (CRP) in improving habitat for wild pheasants in the Midwest. Steve points primarily to the CP33 program, a special section of the Conservation Reserve Program established in 2004, the first federal legislation aimed at restoring the bobwhite quail. The program pays private landowners to establish a habitat buffer around their crop fields. Doing so benefits dozens of wild species, including quail. The national program has allocated 250,000 acres across the country to improve habitat for the game bird. Currently Virginia's allotment is 3,600 acres. Unfortunately, only about one-third, or 1,484, of those acres are being used. Right now, Quail Forever, Quail Unlimited, the Farm Service Agency, and the Natural Resources Conservation Service are working to get the remaining 2,150 acres into the program.

The Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS) work hand in hand to establish the program on private land. An interested landowner should first contact their FSA office, located in the local USDA service center. The FSA will then determine the eligibility of the property. The land must have a "cropping history," having been dedicated to an agricultural commodity during four of the six crop years from 1996-2001. If the land

Shooting to a rising covey of quail is one of the ultimate experiences when hunting this prized upland game bird.

is eligible, the landowner will sign a 10- to 15-year contract, agreeing to plant and maintain a habitat buffer for upland birds for the duration of the contract term. As a sign-up incentive, the landowner receives $10 per acre per year paid at contract approval, one hundred dollars for every acre placed in the program under a 10-year contract. The NRCS then works with the program participant to prescribe seed mixtures which will provide an ideal habitat for upland birds. The FSA provides a 50% cost share reimbursement for all eligible costs incurred in conjunction with the conservation period. Further, a practice incentive payment is disbursed to the participant, calculated at 40% of all eligible costs. In essence, the participant is reimbursed 90% of his or her out-of-pocket costs. Additionally, the landowner receives an annual rental payment of up to $90/acre every October for the life of the contract.

On the Scent

With a little directing and encouragement, Betsy and Pearl push through the thick cover of the "Custom Hunts" game preserve outside of Keysville, still searching for the whiff of a bird. Suddenly and almost without warning Betsy turns her head, dropping her body low to the ground, and freezes. Pearl quickly locks up as well, backing Betsy's point. They have found the birds. Steve readies his gun and advances in from the left. As Steve nears Betsy's nose, two quail lift simultaneously into the air. Steve levels his gun and fires one shot, followed closely by another. The result of the first shot is a puff of feathers and a fallen bird. The result of the second: a quail still sailing through the air and settling back down into the cover some 50 yards ahead, unharmed.

Perhaps one of the biggest problems for wild quail in Virginia has been the invasion of fescue, a grass

A well trained hunting dog, such as this Llewellin, is a great asset in retrieving downed birds.

too thick to allow quail to move around. "Recreational bushogging," as Steve Bebout calls it, or bushogging once or just a few times a year, promotes the growth of fescue. In order to avoid this problem, landowners should make sure there is no fescue in any seed they use.

Quail Forever hopes to offer its own seed program soon, specifically designed for upland habitat. Quail Unlimited also has a long-standing, national seed program. And if you are interested in learning more about early-succession habitat management to benefit the bobwhite, there's a new tool available. The University of Kentucky and *The Progressive Farmer* magazine have teamed up to offer a quail habitat management course, available on CD. The CD provides a good primer on wild quail ecology and how to manage for the bird. (See resources listed, page 8.)

Both Quail Unlimited and Quail Forever work closely with state and federal natural resource agencies to identify solutions to aid Virginia's wild quail population. DGIF small game biologists like Gary Norman and Marc Puckett have supported their efforts and share the excitement over the prospects of improving quail habitat and numbers.

"The Department has recently been tasked with developing a new quail action plan, following up on previous efforts that led to the nation's first plan back in 1996. Since that time, enormous strides have been made in quail management across the Southeast. The successes of each state are building upon each other," notes quail program manager Puckett.

He adds, "We now have a chance to incorporate many of the lessons

As Virginia's countryside changes to meet its growing population, hunters, farmers and sportsmen's groups are teaming to improve quail habitat.

we've all learned over the past 12 years. If the sportsmen give us a chance, we'll accomplish some great things for quail in Virginia. All of our partners will be critical to success on this front."

Both Puckett and Norman believe that increasing quail populations in a rapidly changing landscape is one of the most difficult challenges ever undertaken by groups like Quail Forever. "We've had great success with deer, turkey, bear, and other species, but quail present special challenges," Norman says. Lack of habitat represents the number one hurdle to quail recovery.

Biologists and conservationists are looking to find new habitat on a large scale. The Department continues to work with quail groups across the state, offering guidance on a variety of landowner programs and habitat management options suited to particular regions.

"The good news? This is America. Citizens make things happen," Puckett maintains. "Folks see a problem and they don't sit around waiting for someone else to fix it; they start in on it themselves."

Groups like Quail Forever and Quail Unlimited surely prove his point.

Betsy now tromps back, head held high above the cover, with a gait that doesn't attempt to hide her bursting pride. Hesitant to release the bird from her mouth, she circles Steve several times before finally giving in and dropping it in his extended hand. Immediately they move forward again, Betsy and Pearl, searching for more scent and the hope of more birds.

Steve acknowledges that it will certainly take some hard work and dedication, but he hopes in the not-too-distant future to put Betsy and Pearl on some wild Virginia quail courtesy of Quail Forever, Quail Unlimited, and many others who are dedicated to bringing back this signature game bird.

Tee Clarkson is an English teacher at Deep Run High School in Henrico County. Tee is also a member of the Virginia Outdoor Writers Association.

Land Management Tips to Benefit Quail

by Marc Puckett

Evaluate – Obtain an aerial photograph of your property and conduct a habitat inventory. Look for opportunities to manage for quail. Areas to identify include: crop fields, particularly near clear-cut timberlands, pine stands, new clear-cuts, pastures and hayfields, old fields, power line or utility rights-of-way, and even some hardwood stands that could be managed as open oak woodlands.

Invest – Invest in the equipment necessary to manage adequately. If you do not own or have access to a tractor and disk, consider purchasing one. A tractor in the 35 to 60 horsepower range with hydraulic capabilities and an adjustable disk can accomplish 90% of what is necessary to manage land. Add a good herbicide spray rig and spin seeder and you can create a haven for quail. If you can't afford a tractor, consider an all-terrain vehicle with similar, but smaller attachments. Some of the heavier work can be done by contracting, or by renting equipment.

Eliminate – Once you have decided where you can manage for quail, start by eliminating mat forming, non-native invasive grasses such as fescue. For example, you may have a portion of a hayfield from which you really do not need to harvest. After you've taken the last spring cutting of hay, allow about 6 to 10 inches of new growth to occur. Then, spray with a herbicide containing glyphosate (Roundup®, RazorPro®, or equiva-

Producing and sustaining suitable habitat is the biggest hurdle to restoring the prince of game birds to the fields and forests of Virginia.

Additional Information

Landowners may find contact information for their local Farm Service Agency at: http://www.fsa.usda.gov/FSA/stateoffapp?mystate=va&area

For information on creating ideal quail habitat on private lands: "Beyond the Food Patch: A Guide to Providing Bobwhite Quail Habitat," Published by DGIF; available by calling the Wildlife Division, (804) 367-1000.

Landowners may also call their regional DGIF office and speak with the district biologist. Go to: www.HuntFishVA.com for contact numbers.

Quail Unlimited Seed Information: http://www.qu.org/content/habitat/seed_program.cfm

Habitat Management CD from *The Progressive Farmer (shown above)*: www.progressivefarmer.com/farmer/store/wildlife/quail.html

Biologists recommend planting sunflowers with other seed sources—such as millet—in a designated food plot.

The early succession plants that thrive after a prescribed burn provide food and cover for quail.

lent) per the manufacturer's recommendations. Eliminate all non-native grass that is not needed, being careful to minimize erosion. Do not spray on steep hillsides, farm roads, and other such areas.

Encourage – After eliminating non-native cover, encourage the growth of native annual weeds, flowers, shrubs and grasses. Once the non-native cover is gone, a flush of new plant growth will occur 4 to 6 weeks after spraying. The trick is to learn your plants. Encourage things like blackberry, plum, sumac, native sunflowers, beggar-weed, ragweed, partridge pea, coneflower, croton, and broomstraw. Control unwanted invaders such as yellow poplar, sweet gum, red maple, pine and other tall growing trees by spot-spraying with selective herbicides, hand cutting, or spot mowing.

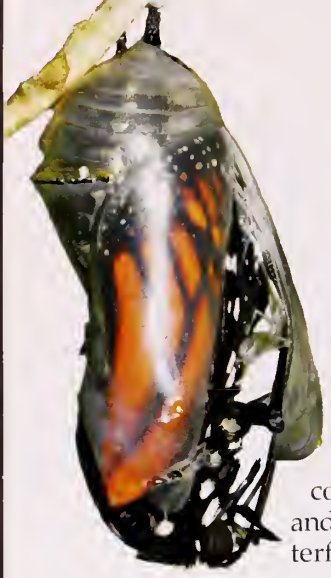
Saturate – Picture every quail covey's home range as being a 25- to 50-acre elliptical area and think about how you will saturate this area with quail cover (without eliminating other valuable cover types). Each covey range should consist of 15% to 20% shrubby, brushy patches (sometimes called "covey headquarters areas"—things like blackberry thickets, plum and sumac thickets, or similar), 40% to 60% brood rearing cover (annual weeds, flowers and grasses), and about 30% nesting cover (areas containing 50% native grasses like broomstraw, mixed with annual and perennial weeds). Also, 5% to 10% of an area can be planted in annual food plots. Use a good mixture, such as 5 lbs. each of millet, milo, buckwheat and sunflower. Substitute forage sorghum for milo in areas where deer densities are high. Leave portions of planted food plots fallow each year. For example, in a 2-acre field plant one acre each year, leaving the other half fallow. One of the best plantings is a mixture of 5 lbs. each, Korean and Kobe lespedeza, planted over a disked seed bed in February.

How? – Thin and conduct understory burning on all available acres of loblolly, short-leaf or long-leaf pine stands (use a burning contractor and focus on safety first). Manage old fields by rotational disking, rotational burning (in each case, disk or burn ⅓ each year during February or March), or spot-spraying. Create hedgerows in crop fields. Allow native, brushy, weedy borders to develop around crop fields. Plant logging decks with Korean and Kobe lespedeza, as described earlier.

Research – Do your homework. A 21st-century landowner has an unlimited amount of knowledge at their fingertips. Visit the Quail Unlimited and Quail Forever Web sites and check back to our Web site, where land management resources and tips will be posted. □

Biologist Marc Puckett is the small game project leader who coordinates the quail action plan and develops programs to effectively manage small game species in Region II.

Featherweight Fliers



Monitoring The Monarch Migration

story and photos by Marie Majarov

It all happens soundlessly. Daylight hours in Virginia shorten; the angle of the sun diminishes; the air cools. Brilliant orange and black monarch butterflies, the year's final generation, push their way from gilded chrysalides with an agenda vastly different from their short-lived, frolicking, summer kin. These fall monarchs postpone mating, embarking instead on a genetically programmed 6- to 8-month mission to avoid winter's deadly cold. A breathtakingly grand migration takes shape as, one by one, featherweight fliers lift off to commence a perilous journey to the grounds in central Mexico where their ancestors have long overwintered. Joined by others from as far north as southern Quebec and throughout New England, millions of monarchs make their way south, streaming as high as 5,000 feet over the Commonwealth.

"A tale of dedication and love for all wild creatures in a glorious part of Virginia."

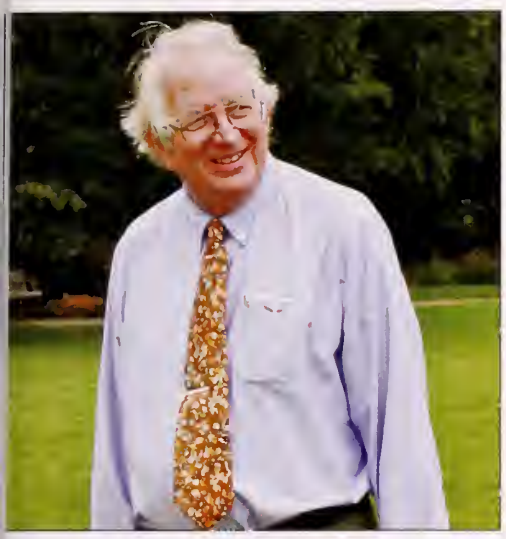
–Lincoln P. Brower

Tough, determined, almost unstoppable, these ½-gram insect pilots make incredible progress, averaging 28-plus miles a day gliding with high-speed air currents and engaging in wing-powered flight. Stopping only to refuel on fall blossoms and roost through darkness, it takes about 40-60 days to reach a narrow Texas corridor through which massive clouds of butterflies, as many as 2 billion, sweep on to their landing place. The destination: 12 colonies, only a few hectares each, within stands of oyamel fir trees at elevations of 11,000-plus feet on the not-too-cold, not-too-warm southwesterly slopes of the Transvolcanic Mountains of Mexico.

To put their 2,000-mile feat in perspective, Toronto zoologist David Gibo estimates that an equivalent distance for a 6-foot-tall person

Above: *A new monarch pushes its way from a tiny gilded chrysalis.* ***Right:*** *A dawn cluster on red cedar,* Juniperus virginiana, *warming before beginning the next leg of their journey.*

Above: *Judy Keen shows off her very necessary mosquito netting as she watches clustering monarchs in a wild black cherry grove.* ***Left:*** *Monarchs are so intent while nectaring on seaside goldenrod that they can be lifted off the plant for tagging.*



Top: *Dr. Brower, project leader, also monitors monarchs in the Blue Ridge near Sweet Briar and lovingly tends his magnificent butterfly garden.*
Above: *Barbara Kreiley demonstrates the monarch counters.*

would be "11 times around the world." How do these monarchs do it? What pathways do they take? Fuel sources? Roosting places? How do they know where to go? What are the obstacles and challenges to success?

Answers to these questions have been the focus of the Chincoteague Monarch Monitoring Project, which celebrated 10 years of outstanding autumn research in 2006. Under the leadership of Dr. Lincoln Brower—the foremost monarch scientist and ambassador, Sweet Briar College Research Professor, and Univ. of Florida Distinguished Service Professor Emeritus—the project has been coordinated by dedicated and talented Professional Interpretive Naturalist Denise Gibbs.

After 5 years of collecting monarch migration data at Cape May, NJ, a well-known gathering point for coastal monarchs and numerous species of birds, Dr. Brower felt that establishing another ongoing monitoring station was "critical for scientific replication" of the emerging Cape May findings. Chincoteague

Chincoteague wet meadows are filled with blooming large bur-marigold, Bidens laevis. *Invasive phragmites can be seen along the meadow's edge.*

National Wildlife Refuge (CNWR), its varied habitats being a natural respite for coastal migrants traveling from Cape May across the mouth of Delaware Bay and down its coast, was perfect, as was the decision for Denise Gibbs to be project coordinator.

A butterfly and native plant specialist, Denise met Richard Walton, director of the Cape May Project while doing freelance lecturing after her own incredible journey, with cancer. She was as enthralled by the research station, as Walton and Brower were with her expertise and enthusiasm. An "instantaneous yes" was her response to their idea that she establish the new post, thus beginning a life-affirming relationship for both monarchs and Denise. Now known affectionately as the "Monarch Lady," Denise has collected detailed scientific data, made copious field observations, tagged thousands of CNWR monarch guests, and educated countless people about monarchs.

During peak monarch migration, mid-September thru mid-October, Denise and dedicated volunteers Barbara Kreiley, Judy Kneen, and

Kate Tufts hustle from sunrise to sunset making either stationary point counts or a 5-mile road census of perched and flying monarchs through salt marsh, wet meadow, tidal canals, mixed deciduous forest, maritime forest, bayberry/groundsel thickets, primary dunes, and interdune areas along the Atlantic Ocean. They take measurements of weather conditions, wind speed and direction. Between censuses, as many butterflies as possible are tagged, some years upwards of 3,000.

Lightweight numbered tags are affixed from Monarch Watch, a monarch conservation organization at the University of Kansas that sponsors a large-scale tagging program to track migration patterns (see *Virginia Wildlife*, June, 2006). Through the years, Denise's tagged monarchs have been recovered in Georgia, along Florida's panhandle, and at the Mexican sanctuaries El Rosario and Sierra Chincua, providing essential information to prove that eastern coastal migrants winter in Mexico.

The largest number of migrating monarchs reported at Chincoteague occurred in 1999 when hurricanes "bottled up" monarchs just north of Denise's location. Clear weather brought an estimated 100,000 visible monarchs surging through CNWR, "literally a blizzard of monarchs." The lowest numbers, of 2002, reflected poor summer conditions throughout their northern breeding range.

Migration 2006 and 2007 were also extraordinary for outstanding monarch numbers, despite the winds and floods of Hurricane Ernesto (in August, 2006) changing much of the island beachfront landscape, destroying extensive nectar and roosting vegetation. Migrating green darner dragonflies, common buckeye butterflies, merlins, northern harriers, bald eagles and tree swallows were also plentiful.

Clustering behavior was a special 2006 focus: Red cedar, loblolly pine, groundsel-tree/bayberry thicket, and seaside goldenrod roosts were photographed and studied.

Kate Tufts measures the wind speed, direction and temperature during a road census of perching and flying monarchs while her husband records the data.

A male monarch is nectaring out of the wind on low growing horsemint, Monarda punctata.

Environmental hazards, man-made challenges, and nature's intricacies observed at CNWR are astounding! Chincoteague's naturalized ponies leisurely munch spartina grasses down to mudflats and promote short-growing horsemint, giving tired migrants a welcome opportunity to nectar close to the ground, protected from the wind. However, at the same time this increases exposure to invertebrate predators like praying mantids, tolerant of monarchs' poisonous constitution. The ground can become littered with orange and black wings that mantids leave behind after dining on monarch heads and abdomens. Green garner dragonflies catch monarchs in mid-air; birds puncture their wings but quickly let go, repulsed by the bitter taste. Strong winds can pin featherweight fliers to barbed wire fences or blow them out to sea because the protective dunes are fragmented or washed away. Countless tattered and punctured butterflies valiantly endeavor to complete their mission.

Denise's botanical knowledge combined with the information compiled from her research about monarch behavior, numbers, nectar sources, and needs on the refuge enable her to aid biologists in develop-

Denise carefully applies a Monarch Watch *tag to a monarch wing.*

Large bur-marigold, Bidens laevis, *are important nectar sources for migrating monarchs.*

ing comprehensive management strategies for monarchs, including: safe spraying of invasive phragmites, preservation of beautiful wet meadows of nectar-rich bur-marigold flowers, and increased stands of seaside goldenrod.

From Chincoteague, monarchs continue southward, down the Delmarva Peninsula to cross the mouth of the Chesapeake Bay often by flying directly over the Bay Bridge-Tunnel for a 17-mile jaunt to Virginia Beach. At the Delmarva's tip, monarchs are again monitored and more are tagged in another Brower-led research project, the Monarch Migration Project of the Coastal Virginia Wildlife Observatory (CVWO). It is coordinated by Larry Brindza at the Eastern Shore of Virginia NWR, Fisherman Island NWR, and Kiptopeke State Park.

The southern tip of the Delmarva Peninsula, a beautiful area that "harbors tens of millions of migratory landbirds" each year, Larry explains, "concentrates the migrating birds and monarchs ...and is a major monarch roosting site, especially in October when hundreds and sometimes thousands of monarchs spend the night roosting in trees." As at CNWR, 1999 was special: "Over 100,000 monarchs roosted on Fisherman Island NWR on the night of October 7."

Larry's strong biology background as an FDA scientific reviewer provides him with critical abilities and enthusiasm, enabling him to work at unraveling monarch migration mysteries. With a full-time autumn field research assistant at CVWO, three daily point count censuses, a roost census, tagging, and presentations to park visitors are conducted for seven weeks each fall. Weight and measures of forewing length are also collected. Six years of monarch weight and measures from the Virginia Eastern Shore sites and Occoquan Bay NWR have led to important findings that reveal significant differences in the migration success of monarchs to Mexico and will

Common milkweed, Asclepias syriaca, *is the most prevalent of the milkweed family in Virginia and the host plant for 90% of the monarch butterflies that overwinter in Mexico.*

be published in a major entomology journal this year.

After the Delmarva, there are no other official monitoring sites along the East Coast. Virginia's monarch monitoring projects at CNWR and CVWO have been and continue to be crucial in the ongoing study of the eastern coastal monarch migration.

Monarchs reach their Mexican destinations during November. Following a well deserved rest, they will mate and begin their return northward with the coming of spring. Sadly, Lincoln Brower describes this, "one of the most extraordinary annual migrations on our planet," as an "endangered phenomenon" and predicts that if precious overwintering sites, summer habitat, and migratory routes are not protected and preserved the migration will be doomed within 20 years.

What You Can Do

Across the United States, Canada and Mexico many government agencies, organizations and individuals are working together to craft a long-range plan to conserve the monarchs' magnificient migration: the "North American Monarch Conservation Plan" (NAMCP). Each of us can contribute to this effort by advocating for butterfly gardens in our backyards and communities that include both milkweeds and various species of nectar plants (see the "Waystation Project" at monarchwatch.org). Denise Gibbs and Lincoln Brower feel migrating monarchs most appreciate fall blooming goldenrods *(Solidago)*, joe-pye weed *(Eupatorium)*, ironweed *(Vernonia)*, asters *(Symphiotrichum)*, bur-marigolds *(Bidens laevis)*, and mexican sunflowers *(Tithonia)* for refueling.

Create, conserve, and protect monarch habitats! □

Marie and Milan Majarov (www.majarov.com) of Winchester are clinical psychologists, nature enthusiasts, and members of the Virginia Ontdoor Writers Association. They maintain a thriving monarch waystation at their home.

For More Information:

Journey North:
www.learner.org/jnorth

Monarchs over Chincoteague NWR:
mysite.verizon.net/robgibbs301/monarch.htm

Monarch Butterfly Conservation in North America:
www.fs.fed.us/monarchbutterfly

Monarch Watch:
www.monarchwatch.org

Monarch Butterfly Sanctuary Foundation: www.mbsf.org

Hope's Harvest

by Keith Johnson

While I love all of the time I spend with my daughter, it is the time we spend together outdoors that I cherish the most. Her name is Hope and that is a story in itself. She is 14 years old with varied interests—in softball, shopping and other girly stuff. She also looks forward to our hunts, where we sit together in a tree stand or buddy blind. She has actually taken four deer prior to this season. Hope has also been a great advocate and supporter of the Hunters for the Hungry program.

This particular hunting event began one morning at 6:30 with a reminder about the importance of scent management. The reminder was about Hope's promise not to wear perfume or strong deodorant, in an effort to reduce our scent challenges. This was going to be difficult for Hope, because our hunt was scheduled for after school that same day. We laughed when her mom suggested I'd be sending her poor stinky daughter off to school, then asking her to go out in the woods later in the afternoon.

It was clear that she was quite excited that day because we had seen several deer during previous evening hunts. Her enthusiasm was at its peak because she had passed on at least two shooting opportunities a few days prior. As I picked her up from school that afternoon, it was obvious that she was absolutely ready to go. It was Friday, November 16th, and we were both glad to go one last evening using the muzzleloader. Hope had not desired to hunt with a muzzleloader prior to this season. The drive would take us about 45 minutes, allowing time for a snack and some homework completion.

As we arrived, Hope discreetly changed from school attire to hunting garb and camouflage and we both applied a scent eliminator. I am sure she still had on earrings, which do not seem to distract deer. Our walk to the stand only takes about ten minutes. The stand is a small, elevated box blind that actually used to be her sliding board platform when she was much younger. It now serves its second life as a sanctuary for us. It is located in a small cutover elevated above and overlooking a large wheat field. We predicted the wheat in the low grounds would be succulent to the deer, due to a recent drought. It was our plan to have plenty of deer activity that hopefully would entice mature bucks to the area.

At our approach, we saw what appeared to be a keeper out in front of the stand at about 120 yards but moving away. Hope did not take the shot. As the nice buck reappeared a few minutes later, she looked through her scope and realized that it was a six-pointer. Our club currently participates in the Quality Deer Management program, which advocates taking only mature bucks and proper herd management by harvesting an adequate number of mature does. Hope is as disciplined as any of our tenured hunters. She may even be more disciplined than her dad.

During the course of the next hour, we saw several deer, including a few small bucks and small does or buck fawns. Hope realized that the day was actually the anniversary of her taking her first eight-pointer, which was a nice but young trophy for her. We took turns looking through new binoculars, which she had just received as an early Christmas present from a great couple who support youth hunting to its fullest. They had warned her that her dad just might try to acquire that equipment.

Then it happened. We both noticed that a mature, heavy antlered buck was about to come into view

Quality time outdoors enhances family bonds.

from a thicket area. He appeared out in the wheat field at about 250 yards. I said to her that it was the one that we wanted and we had about 20 minutes to spare for him to make his way to us before daylight. It seemed like a long wait for him to come into range as he took his time looking at does on the other end of the field. He continued walking toward us. I would let her shoot if he got within 125 yards. The muzzleloader had performed to that distance just fine. We had discussed the shot placement. I could feel the stand shaking; it was Hope. I whispered to her to just look away in an effort to calm her nerves. It was tough to do. He stopped and got almost broadside at about 120 yards, so I gave her the "go ahead."

Photo courtesy of Dean Nuckles

Keith Johnson with daughter Hope. Her smile says it all!

She carefully aimed and pulled the trigger. The gun did not go off, just the percussion cap. After years of hunting, it was my first misfire experience. The slightly startled deer actually ran in a direction that was quartering toward us and slightly closer but ended up behind some brush. He stopped. As I was about to let her give it another try, I decided to let her use the gun I was holding, which was an older Knight Wolverine muzzleloader. It too did not go off, just a loud click, and the deer ran again to about 95 yards straight away and jumped a hedgerow. I was convinced at that time that the deer would surely get away and all of our preparation would be for nothing. I was thinking that she would never hunt with a muzzleloader again.

I quietly told her that I had never had a misfire. I whispered that the safety prevented the second gun from going off. Then I quietly recocked it and took the safety off. The deer was now walking broadside in a distant opening but behind several trees in the hedge row obstructing her shot. He was out to about 110 yards. Hope would have two available openings to shoot. The mature buck now seemed nervous and did not stop on the first opening. However, after a loud grunt call from me, he did stop just as he stepped into the second clearing. Hope took the shot just as he stopped. The shot was perfectly executed. He ran about 40 yards before he expired.

It is a nice eight-pointer with a great mass and tall antler structure. We celebrated as if she had never taken a deer! It is a moment I will never forget, something I will cherish all of my life. The celebration included hugs and near tears of joy. Hope talked about her hunting guide service, but was quick to remind me of the critical misfires. (It was later discovered that dad was to blame for those misfires, not the equipment.) This animal weighed 205 pounds before field dressing and had a 26-inch neck behind the ears. While we enjoy venison each year, it was extremely important to Hope to donate her deer to Hunters for the Hungry, and she did so.

Looking back over the day, several thoughts come to mind. Americans are sometimes participants of a fast-paced lifestyle. We find ourselves going from event to event and hardly allowing time for adequate rest. This lifestyle sometimes does not create a harmonious learning environment for our kids. Busy schedules may not always foster a father-daughter relationship that includes genuine, open communication.

Quality time spent outdoors is a true and valuable tool that can enhance any relationship. The quiet of the outdoors provides an opportunity for great times together and an occasional, special harvest. These times and conditions are truly gifts from God.

My daughter and I are blessed to share interests, and I am blessed that she truly loves to hunt. While Hope has heard of less than ethical hunting practices, she has no desire to participate in such activity just to say she has killed a deer. She maintains quite a high standard for hunting, with well-defined ethics. It is my hope to continue promoting her desire to hunt with the highest standards while having fun. With dwindling numbers of youth hunters today, it is imperative that we share the wonderful experience of being outdoors—and continue a great tradition—by hunting together.

Our gratitude to reader Keith Johnson, who contributed this essay.

Using the Arts to *Inspire Stewardsh*

Through their artistic talents, Atlee High School students bring awareness of the natural world around them to others.

story and photos by Gail Brown

When you learn to know nature, do you better know yourself? Does spending time outside change how you feel inside? Or do you just get hot and sweaty and miss that virtual world, so programmed, so predictable? A bird's-eye view of Atlee High School's Cool Spring Pond helps to answer the questions.

The fine arts department led the way in caring for the pond and wetlands. Here, Alice Simon creates a pleinair (French for "on-the-spot") demonstration with her painting. ***Above:*** *Students learn first-hand about the pond, thanks in part to a DGIF grant that enabled fishing to be added to the P.E. curriculum.*

Virginia Naturally

Atlee art teacher Alice Simon believes the connection does make a difference: that relationships formed with nature affect relationships forged elsewhere, and that knowing the natural world helps us find our place in our world. Just like she believed a bear visited their pond on his way to, well, anywhere but where he found himself. Simon shared news about the paw print days before the rest of the bear showed up near a Hanover mall. Most attributed Simon's observations to her excitement about their pond project. Now they listen and they're excited, too.

It wasn't until Simon's return from Monet's home in France that her vision for using the wetland and pond area as an "outdoor palette" became an inspiration that took root in the minds and hearts of the art department, the student body, and the school community itself. Soon student volunteers were cleaning up litter, creating paths, and experiencing what it's like to be part of something bigger.

Although grants and business partners provided initial support for the project, funding was, and is, an issue. But like those other "ah ha" moments, the kids and the fine arts department came up with an idea: they would "think outside the cube" and create an exhibit to meet the requirements of State Farm's *Good Neighbor* grant. They would interview people and gather stories of human connections: emotional connections, intergenerational connections, and connections with the natural world. Based on shared stories, they would recreate "life's connections" using a variety of media, shape their creations into cubes, and hang the cubes from Atlee's hallway ceilings. Performing arts students would contribute to the exhibit by delivering the message in a different way. Proceeds from the event would go to support the stewardship efforts at the pond.

Today, four years later, the fine arts department and the students continue their work to influence the connection between people and nature. This past year, with a play on words using the school colors, students reused discarded materials to create an exhibit called "Black and Blue Equal Green." Through graphic design, sculpture, painting, photojournalism and music, the students used their artistic talents to promote an awareness of, not only how much we throw away, but also, how all that trash affects the environment.

Have all these experiences changed the kids? According to Simon, "They feel empowered because of their environmental efforts; they know how to make positive changes when issues about the Earth are so important. They have experience and understand how all their voices together form a group effort and that there are many like-minded people who will work together to preserve beautiful spaces." □

A fashion show of gowns created from reused materials raised awareness of the items that go into our landfills, needlessly. ***Top:*** *Cubes created by art students helped raise funds for their stewardship efforts.*

Gail Brown is a retired principal for Chesterfield County Public Schools. She is a lifelong learner and educator, and her teaching and administrative experiences in grades K-12 have taught her that project-based environmental programs teach science standards, promote core values, and provide exciting educational experiences for the entire community.

Lake Conner's LUNKER LARGEMOU

The state's all-time heaviest largemouth bass is a monster.

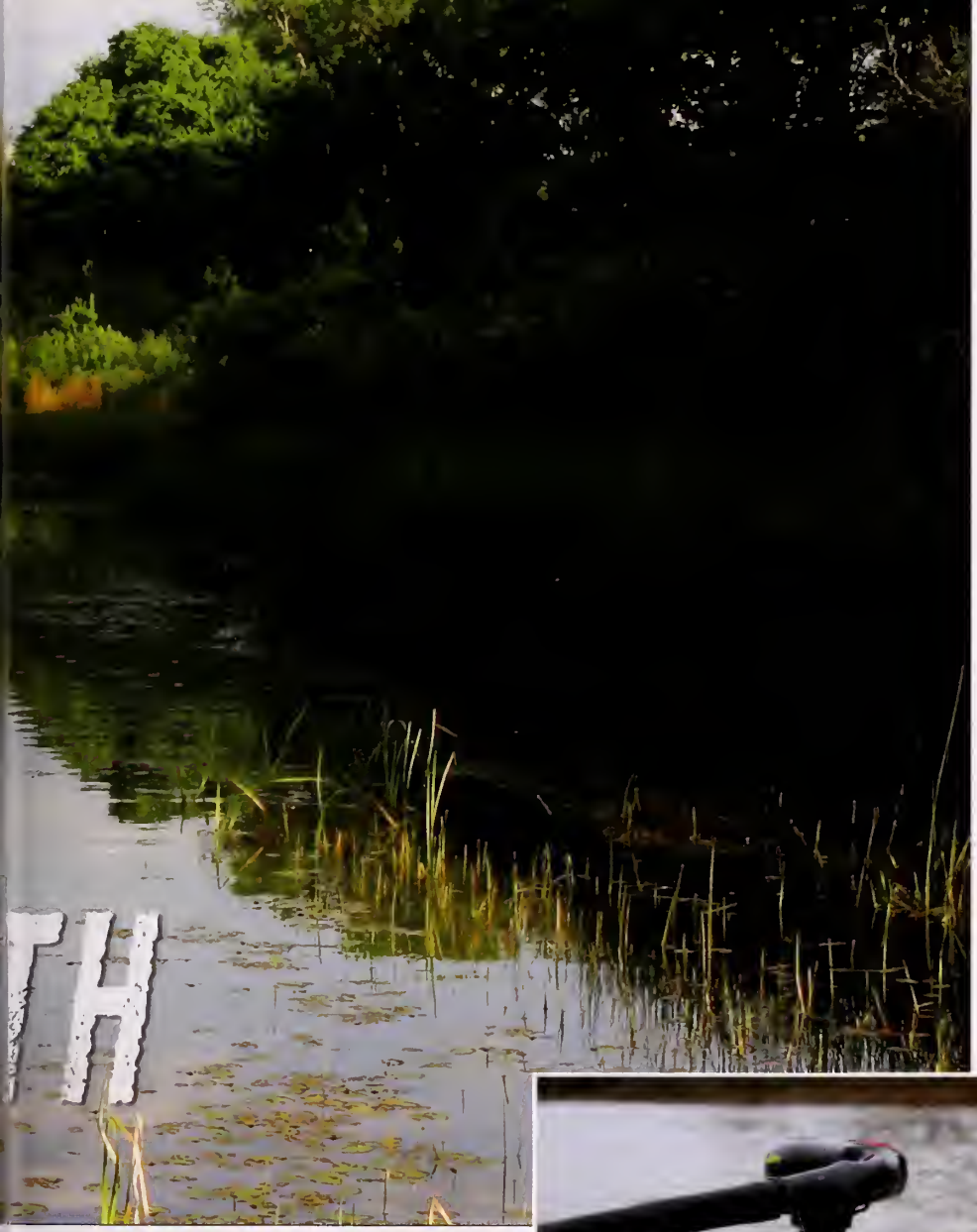
story and photos
by Marc N. McGlade

While the brook trout is Virginia's official state fish, the most sought-after species—bar none—is the largemouth bass. Nothing gets anglers as excited as hoodwinking a lunker largemouth that tail-walks when hooked on the surface after devouring its latest victim—real or fake. With monikers such as black bass, bucket mouth, green trout and largie, the largemouth bass remains the prized possession for freshwater anglers, much in the same way the white-tailed deer is for hunters across the state.

The quest for the next world-record largemouth bass *(Micropterus salmoides)* has been ongoing since 1932, when George Perry landed a 22-pound, 4-ounce monster from Montgomery Lake in Georgia. A few anglers have since come close.

In Virginia, a trophy largemouth bass turns heads and garners attention from those who get to see a lunker. In southern states, any largemouth weighing 8 pounds or more is a trophy. Virginia is one such state. Largemouth bass weighing 8 pounds or measuring 22 inches in length qualify for a trophy fish certificate from the Virginia Department of Game and Inland Fisheries (DGIF). In states such as California, Texas and Florida, 8-pound bass are more common than here in the Old Dominion. However, Virginia's current state-record largemouth is quite respectable, both in the South and nationally.

A 16-pound, 4-ounce beauty is the high-water mark in our state. That historic fish hails from Lake Conner, and the record has remained intact since 1985. Lake Conner is a scenic lake nestled in the northern portion of Halifax County, within



Virginia's rural southside region. The Department owns and manages the lake.

Lake Conner History

Fishing partner Charles Wallace, of Crewe, and I discussed the lake and its record fish. After researching and reading much information about Lake Conner, a trip was scheduled.

Even with a hand-held GPS unit and a map, I soon came to believe that we needed Lewis and Clark to help us find Lake Conner. No wonder a state record finned in the fertile waters. When we arrived, there was only one other boat on the entire 110-acre lake. It was as peaceful a fishing excursion as I can remember.

Construction of Lake Conner took place in 1954. It is a shallow lake, with mean depth of only 11 feet.

Vic DiCenzo, a fisheries biologist with DGIF, believes there are a few reasons why Lake Conner produced the state-record largemouth bass.

"Lake Conner was drained and refilled in the 1970s, so it essentially experienced a 'new lake boom' again," DiCenzo says. "This refers to the combination of higher nutrients from re-flooding and also the lack of competition from an established population. Another factor was that the state stocked some Florida-strain largemouth bass. Lastly, given Lake Conner's location, it does not receive the fishing pressure many of the larger reservoirs do."

What's the Catch?

Of course, there are other species for anglers to pursue besides largemouth bass.

"There is a pretty good crappie population in the lake," DiCenzo adds. "Other species include sunfish—such as bluegill and redear—yellow perch, chain pickerel, bullheads and channel catfish."

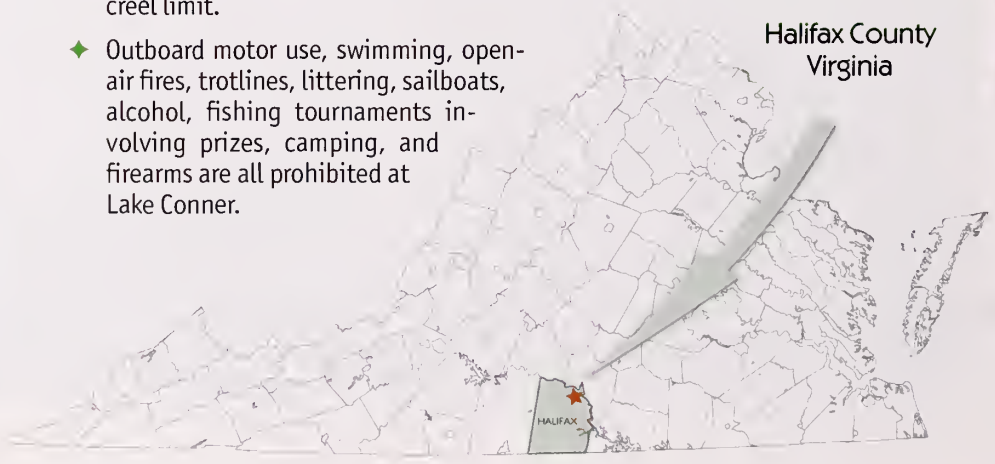
Virginia's state-record largemouth hails from scenic Lake Conner, a Department-owned lake in Halifax County.

More About Lake Conner

- For fisheries information and regulations regarding Lake Conner, contact the Department's district office in Farmville by phone at (434) 392-9645. For even more information, visit online at www.HuntFishVA.com.
- Lake Conner has a single-lane, concrete boat ramp for private boats and a large, gravel parking lot. There are opportunities for anglers without a boat to fish the shoreline adjacent to the boat ramp, as well as the dam. Several benches are available for shoreline anglers. Lake Conner is open all year, 24 hours a day.
- Lake Conner is a trolling motor-only lake and the use of gasoline engines is strictly prohibited.
- Lake Conner is located approximately 20 miles north of South Boston. From U.S. 360, take Route 746. Turn left on Route 603, and then turn right on Route 619. Take a right on Route 623, and then turn right on Route 624 (Lake Conner Road) to the parking lot.
- Regulations:
  largemouth bass–a 16- to 22-inch protected slot (no fish between 16 and 22 inches may be kept; only one bass longer than 22 inches may be retained) limit, 5 per day;
  sunfish–no size limit, 50 per day;
  crappie–no size limit, 25 per day;
  channel catfish–no size limit, 20 per day;
  chain pickerel–no size limit, 8 per day;
  bullhead catfish–no size limit, no creel limit.
- Outboard motor use, swimming, open-air fires, trotlines, littering, sailboats, alcohol, fishing tournaments involving prizes, camping, and firearms are all prohibited at Lake Conner.

The boat ramp can accommodate private boat owners, but gasoline engines are prohibited.

When targeting lunker largemouths, look to sizable lures to trick unsuspecting bass.
Right: *Bottom-bouncing lures such as creature baits catch their share of fat largemouth bass.*



Lake Conner
Halifax County
Virginia

The Department stocks channel catfish every other year.

Many anglers across the state ask biologists whether Lake Conner could produce yet another state record. The small lake has yielded several largemouths in the past that appeared to never miss a meal.

According to DiCenzo, "Lake Conner still has the potential to pro-

Fisheries biologists indicate Lake Conner has a solid crappie population (left), in addition to jumbo-sized largemouth bass, above.

duce another state-record largemouth bass. We have seen fish up to 13.5 pounds, so there is a slight chance a state record is there right now. However, it is unlikely that the lake could produce any records for the other species in the system."

With a state record comes attention. Conner's main draw appeals to bass-casters. DiCenzo explains that bass fishing accounts for approximately two-thirds of the interest and fishing pressure at the lake. Besides bass addicts, anglers come here to fish for crappie and sunfish.

The Record Fish

Richard Tate is the angler who landed the current state record. He caught the giant largemouth on a spinnerbait on April 16, 1985.

"I read a newspaper report that stated the Tate bass may have weighed 17 pounds initially," DiCenzo says. "Biologists think it lost some weight before a certified weight could be recorded."

A largemouth bass that big is truly a behemoth. Anglers caught a few specimens in the 16-pound range from Farmville's Briery Creek Lake, but none was able to usurp Tate's beast as Virginia's biggest largemouth.

Tate's bruiser measured 26.3 inches in length and had a girth of 23.25 inches. That, in simple terms, is a chub.

While it remains to be seen whether Lake Conner can repeat history with a new record, a few things are certain: Beautiful scenery surrounds this remote lake, and willing fish species abound. Lake Conner offers visitors a quiet escape for anglers looking to relax and enjoy Virginia's magical outdoors. □

Marc N. McGlade is a writer and photographer from Midlothian. As an avid bass angler and outdoorsman, Marc is keenly aware of Virginia's state-record fish.

Avoiding Bowhunt

BLUNDERS AND BLO

Learning from someone else's mistakes can make your bowhunting season more enjoyable.

by Bruce Ingram

Writing a story about bowhunting blunders and bloopers makes me recall some of my worst-ever mistakes! A pre-rut October morning in 1997 comes to mind, when I missed three Botetourt deer—including a fine 8-pointer—by over a foot each time, every arrow soaring over the backs of the animals because the peep site had drifted.

Other memories include the time on opening day of the 2006 season, when as I drew on a decent Botetourt buck, the buckle of my left rubber boot scraped against the support of the tree stand seat and sent the buck bounding away; and the time just this past season when I missed the same doe on three occasions—each time by over a foot and a half because my sight pin had slipped.

These snafus are the kind that happen only rarely, in the course of

every decade or so. But then there are the common miscues that occur almost every autumn. For example, in Craig County on the second Saturday of the 2007 early bow season, I miscalculated the "sweet spot" in a funnel when I positioned the stand and then, while afield, watched hopelessly as two does walked by just out of range. On that same Saturday, evening found me aloft in the Jefferson National Forest when a doe with two fawns walked by my portable. As I drew back, the doe espied my movement, and she and her young went springing away, seemingly snorting at every step and no doubt alarming every other whitetail on the mountain.

Here, then, are some steps to avoid, or at least minimize, bowhunting blunders.

Develop a Checklist of Possible Equipment Malfunctions

One of the most prudent steps you can take is to visit an archery shop professional and have that individual go over your bow with you. And by pro, I do not mean an attendant at some superstore who divides his time between the jewelry, cosmetics and sporting equipment departments. My pro is Jody Monaghan, who operates a shop from his Buchanan home.

©Bruce Ingram

Jody Monaghan of Buchanan looks over the author's bow. Going to an archery shop pro before the season can help avoid blunders later.

Before last season I purchased a Matthews Switchback from Jody. After he set up the bow, Monaghan reviewed the parts that could possibly fail; among them, peep sites, sights and rests, releases, bow strings, cables and blades. The latter can lose their sharpness after a single shot or have their heads become loose. Another potential problem, Jody says, involves arrow vanes that can become nicked and cause an arrow to fly inaccurately.

Monaghan recommends that you check these parts before every hunt. I visit an archery pro before the start of every season and have this person examine in detail my bow.

Finding a Sweet Spot in a Funnel

There's an old saying that "close only counts in horseshoes and hand grenades," and that proverb definitely holds true for bowhunting. If you don't find the specific spot on the particular parcel where deer are likely to pass by within your bow range, you will only come close to arrowing a whitetail and commit yet another bowhunting blunder.

For instance, on one of my favorite Botetourt County farms to bowhunt, the landowner performed a selective cut about a decade ago, leaving only mature oak, hickory and ash trees in a funnel that leads from a pine thicket bedding area to a field. Because of the thinning, the remaining oaks have expanded their crowns and produce copious amounts of mast every autumn.

My first stand in the funnel was near the end of it, and on one October evening I watched helplessly as two nice bucks fed nearby, just out of range to my left. I then moved the portable to a red oak tree in the mid-

©Bruce Ingram

Using cover scents can help neutralize a whitetail's keen sense of smell.

dle of the funnel, and once again deer came by just out of range, this time to my right. Finally, I positioned the hang-on in an ash at the very spot the funnel begins. This past October I killed a deer from that ash—a whitetail that strolled by at a distance of just 12 yards.

This is not to suggest that a particular area of a funnel is better than any other; every funnel is constituted differently of course. But almost every funnel possesses a tree where the deer are more likely to come by much of the time—perhaps an area where the funnel narrows or has a pinch point. If you invest the time to locate that sweet spot, chances are you will avoid the bowhunting blunder of "close not being close enough."

Determining Effective Range

Closely related to locating the sweet spot is determining effective range. In 1990, the first year I went afield with stick and string, I labored under the misunderstanding that I could take whitetails that were 30 yards away. After all, the outdoor magazines were full of reports of expert hunters doing so.

After sending arrows above, below and to both sides of a number of deer that year, I eventually learned

Crossbow Hunters Aren't Immune to Snafus

I asked Jay Honse, a veteran sportsman from Fincastle, about the kind of mistakes he has made while afield with a crossbow. Honse, who has chronic back pain, is among those Virginians who switched from a compound to a crossbow when the state allowed the latter to be used during the bow season.

"I always hunt from a ladder stand, and the first thing I realized was that I had to re-cut my shooting lanes," he said. "People generally stand when hunting with a compound, but with a crossbow I have more accuracy if I sit and rest it on an armrest. Just that little bit of difference in height caused me to have an entirely different field of view.

"A second mistake I made was in estimating distance. While hunting with a compound, I feel it is very easy to guess whether a deer is 10 or 20 or 30 yards away and use my sight pins accordingly. Many people can accurately shoot a crossbow up to distances of 40 to 50 yards, but many people, myself among them, can't accurately estimate distances at that range. The result is that they will often shoot too low."

Honse's solution to the problem was to purchase a range finder.

©Bruce Ingram

Fincastle's Jay Honse, shown here, believes that one of the most common mistakes that crossbow users commit is misjudging distance.

the following about my bowhunting skills:

- That there may be plenty of archers who can shoot accurately at 30 yards or greater, but I'm not ever going to be one of them;
- That practice is crucial to bowhunting success. That's why I begin practicing the first week of July every year, shooting every other day;
- That lots of ill-fated things can happen to an arrow as it whizzes toward a deer, and the farther away that whitetail is, the more likely those things are to occur;
- That I can shoot accurately out to 20 yards and that is my effective range;
- That almost all the deer I have killed with a compound have been at distances less than 15 yards; and
- That if I wait, a deer will almost always come closer to my stand and offer a better shot.

To again use the example of the deer that I tagged in the Botetourt funnel, I first glimpsed that whitetail when it was 20 yards away and feeding very slowly and once even bedding for about 15 minutes. I could have lost an arrow when the deer first appeared, but I waited until it was 12 yards distant and standing still broadside. The arrow sliced through the deer's boiler-room, and the animal collapsed within a few yards and within sight.

Respect a Whitetail's Sense of Smell and Sight

The first four years I bowhunted, I failed to kill a deer, primarily because I neglected to respect a whitetail's sense of smell. The result was that many times I heard animals snorting and stamping after they winded me, and I am sure that numerous deer scented me and departed without my even knowing they had been nearby.

Today, I rarely commit the blunder of being scented. I wear carbon-based hunting clothes, such as those made by Scent-Lok and Scent Blocker, and also employ various cover scents—especially to items such as hats, gloves and the bow itself.

©Bruce Ingram

Being aware of the various parts of a bow that can go wrong and having replacements for them is a sound precaution.

I also have come to profoundly respect a whitetail's sense of sight, especially after having many deer become alarmed after they spotted me drawing. To avoid this blooper, wait until a deer's head moves behind some obstruction or is engaged in feeding.

I have no hope of ever having an error-free bowhunting season, but with a little effort, I can minimize my blunders and bloopers.

©F. Eugene Hes

Bruce Ingram is the author of The James River Guide, The New River Guide, and The Shenandoah/Rappahannock Rivers Guide. To obtain a copy, contact Ingram at P.O. Box 429, Fincastle, VA 24090 or be_ingram@juno.com.

Be Wild! Live Wild!

Virginia's

Killdeer

story and illustrations
by Spike Knuth

Plovers belong to a large taxonomic group referred to as shorebirds, along with sandpipers and many others. Unlike sandpipers, which generally have narrow bills of varying lengths for probing in mud, plovers have short pigeon-like bills that are well suited for feeding in a variety of habitats from beaches to grass pastures. Plovers are mostly visual feeders, although the ultrasensitive soles of their feet enable them to detect movements of prey under the surface. When foraging they typically run toward food items, pluck them from the ground, then stop suddenly and stand upright to search for more to eat.

Their bodies are stockier than most other shorebirds and they have long, pointed wings and short, rounded tails. Plovers are strong runners and powerful fliers.

There are nine species of plovers that occur regularly in North America, of which three migrate through Virginia and three breed here. There are two genera: the *charadrius*, which have prominent black bands on their chests, and the *pluvialis*, which have dark bellies during breeding.

Plovers are generally found in open habitats such as beaches, tidal flats, sand spits, tundra, pastures or agricultural fields. Normally they don't gather in large, tightly packed flocks, like sandpipers do, except maybe during migration. They are usually found singly or in small, scattered groups.

Many plovers breed in the Arctic and are circumpolar, nesting in Europe and Asia and wintering in Europe, Asia, Africa and the Middle East. The nests of plovers are all similar in that they consist of shallow depressions in sand, gravel, grass, leaf litter, or tundra. Northern breeders have but one brood because of the shortness of their season, and the young are precocial, having the ability to run about and feed on their own as soon as their natal down is dry. When the nest is threatened, plovers exhibit the broken wing act to draw intruders or predators from the nest.

Plovers have two distinct plumages for the spring and summer breeding periods and later for fall and winter. Also, they are strongly migratory, with some covering great distances of many thousands of miles between their breeding wintering grounds.

All plovers are threatened, as coastal lands and wetlands are developed and as human populations and activities continue to encroach upon their habitat.

Killdeer
(Charadrius vociferus)

Measuring about 9 ¼ to 10 ½ inches, the killdeer is the most common of our plovers and is easily identified by two distinct black bands across its lower

Wilson's Plover

Plovers

Piping Plover

Semipalmated Plover

neck and upper breast, and its call of "kill-dee" or "dee-dee." It also shows an orange-brown rump and upper tail, and a white stripe the length of its wing in flight. They are birds of the pastures, plowed or harvested croplands, grassy and open fields, and mud flats.

They frequently nest at construction sites, in gravel parking lots or even atop flat roofed buildings, where their white eggs marked with brown, black and lavender are perfectly camouflaged.

Killdeer winter over most of the southern half of the United States, the Mexican coasts, and northern South America. In Virginia, these hardy plovers may be seen year-round in low elevations.

Wilson's Plover
(Charadrius wilsonia)

The Wilson's plover resembles its more familiar cousin, the killdeer. However, it is smaller, measuring about 6 ½ to 8 inches, has a single black breast band, and has a larger, thicker black bill. Wilson's plovers occur on sand and shell beaches, sand flats and spits, and on exposed tidal mud flats.

Wilson's plovers are a state endangered species in Virginia. The Commonwealth represents the northern extreme of the bird's breeding range, where its nesting distribution is confined to the barrier islands located along the seaward margin of the Eastern Shore. The nest consists of a scrape in the sand amid scattered pebbles,. shells and driftwood, or patches of beach grass. It often nests in close proximity to tern and skim-

mer colonies as well as American oystercatchers and piping plovers. In Virginia, the breeding population has remained relatively stable in recent years, with an average of 28 pairs since 2002.

Wilson's plovers feed primarily on fiddler crabs. Their calls are flute-like whistles sounding like "wheet," or "queet-queet-quit-quit."

Wilson's plovers gather in loose flocks at the end of July and winter along the southern reaches of the Gulf coast and as far south as Guatemala.

Semipalmated Plover

(Charadrius semipalmatus)

The semipalmated plover is the most numerous and most common plover along the Atlantic coast. It's a small plover, measuring up to 7 ¼ inches, and is named for the partial webbing on its outer and middle toes. It has a single black band on its breast. Its bill is orange with a black tip; its legs and feet are yellow-orange; and its call is a double whistled "cher-wee," given in flight.

Semipalmated plovers are a circumpolar species that breed from Arctic Ocean shores to Nova Scotia in the eastern part of the continent. They build the typical depression-in the-ground nest like the other plovers. They favor beaches, sand and tidal flats, and small shallow pools. Inland they are found on large lakes or wet, plowed fields. Marine and terrestrial insects and worms make up most of their diet, although they are known to forage on small crustaceans as well.

The semipalmated plover is a migrant through Virginia. In the fall they begin showing up in mid- to late July and typically reach peak numbers in mid- to late September. Spring migration occurs from March through June.

Piping Plover

(Charadrius melodus)

Piping plovers are a federally listed species. The Atlantic breeding population, a portion of which breeds in Virginia, is listed as threatened, while the Great Lakes and northern Great Plains populations are listed as endangered and threatened, respectively. The piping plover favors open, sandy beaches and sand flats as well as lakeshores and dunes. It is a small bird, measuring about 7 inches, with upper parts the color of the sand and white underparts, and a black ring or band at the base of the neck, sometimes broken in front. The legs and feet are yellow-orange and the small bill is orange with a black tip.

Black-bellied Plover
(winter plumage)

Golden Plover
(spring/summer plumage)

The piping plover's call is described as a melodious, bell-like "peep'lo," with the first note being low and the second, higher. Around its nest it gives off a shrill "weech-weech." Along the Atlantic coast, they nest on sand, forming a shallow scrape with small pebbles or bits of shell lining the bottom of the depression. In summer, piping plovers inhabit the broad, open stretches of sandy beaches, preferring sandy flats just above the high tide line or between the dunes. They may also nest at dredge material sites.

The greatest threats currently facing the Atlantic coast population include loss of habitat, human disturbance, flooding and tidal inundation, and predation. As with Wilson's plovers, the present breeding distribution in Virginia is confined to the barrier islands. They are early fall migrants and winter mainly along the southeast Atlantic and Gulf coasts.

From 1986 to 2003, an average of 106 pairs nested in Virginia. In 2004 the population began to increase, and by 2006 grew to 202 breeding pairs. This increase is due in large part to the protected status of the barrier is-

lands, which offer plovers and other beach nesting birds relatively undisturbed breeding habitat. In addition, ongoing predator management efforts undertaken by island owners have paid off.

Black-bellied Plover

(Pluvialis squatarola)

The black-bellied plover is the largest of our plovers, averaging 11 ½ inches. It has black, brown and white upper parts, and its chin, throat, part of the side of its head, breast, and abdomen are blackish-brown during the breeding season. In flight it shows a white rump, white wing stripes, and a conspicuous black patch under its wing. Its call is a loud "pee-o-wee," or "pur-a-wee."

Black-bellied Plover
(spring/summer plumage)

It is a strong, fast flier and a wary and alert bird. When landing, it will stop suddenly and stand statue-still for a long time before moving about to feed. It frequently mixes with dunlins, ruddy turnstones and red knots.

Black-bellied plovers breed on the Arctic coasts and, like other plovers, they nest on the ground in the tundra often on a ridge or knoll that offers a long-distance view. Come fall they change into their winter plumage, which is grayish above with light brown markings and whitish below with faint markings. However, some birds on migration may still show patches of black on their bellies into November.

Black-bellied plovers occur on tidal flats, beaches, open salt marshes, flooded fields and grasslands. In coastal areas they feed on mollusks, crustaceans and marine worms. Inland they feed on grasshoppers, grubs, beetle, locusts and earthworms.

Fall migrants start appearing in the northeastern United States in July en route to their wintering grounds, which extend from Massachusetts to Louisiana and south to Brazil and Peru.

American Golden Plover

(Pluvialis dominicus)

The American golden plover is an uncommon fall migrant in Virginia. This species embarks on some of the longest migrations in the world, which can extend from Arctic tundra breeding grounds to tropical wintering sites. Their spring migration takes them up through the interior of the Unites States to their breeding grounds in the Arctic tundra and northern Canada and Alaska.

They take a completely different path on their fall migration, flying offshore over the Atlantic from Nova Scotia to northeastern South America, with some passing over Bermuda and the West Indies. They are capable of landing on the water to rest and feed, helping them on their journey ultimately as far south as Argentina—a flight of many thousands of miles.

They are basically black below with dusky upper parts flecked with white and gold. They measure about 10 ½ inches. Calls are killdeer-like; a "quee-e-e-e-a," or a short "quee."

Only occasionally would they be seen on the East Coast, sometimes because they are driven inshore by storms. However, juveniles are known to migrate inland and along the Atlantic coast en route to South America. When alighting, they hold their wings briefly over their backs, and they bob their heads frequently. At this time their plumage is brownish above with white markings and white below.

Spike Knuth is an avid naturalist and wildlife artist. For over 30 years his artwork and writing have appeared in Virginia Wildlife. *Spike is also a member of the Virginia Outdoor Writers Association.*

Be Wild! Live Wild! Grow Wild! is a regular feature that highlights Virginia's Wildlife Action Plan, which is designed to unite natural resources agencies, sportsmen and women, conservationists and citizens in a common vision for the conservation of the Commonwealth's wildlife and habitats in which they live. To learn more or to become involved with this new program visit: bewildvirginia.org.

Golden Plover
(winter plumage)

Journal

2008 Outdoor Calendar of Events

Unless otherwise noted, for more information on workshops go to the "Upcoming Events" page on the Department's Web site at www.HuntFishVA.com.

October 18: *Youth Fall Turkey Hunt Day.* For youth 15 years of age and younger.

October 18: *Family Fishing Workshop,* Bear Creek Lake State Park, Cumberland.

October 25: *Youth Waterfowl Hunting Day.* For youth 15 years of age and younger.

October 25: Fall firearms turkey season opens.

November 15: Firearms deer season opens.

by Beth Hester

Fly Fishing Virginia: A No Nonsense Guide to Top Waters
by Beau Beasley
2007
No Nonsense Fishing Guides
ISBN-10: 1-892469-16-2
Introduction by King Montgomery

"Fly Fishing Virginia is filled with detailed information about the rivers, streams and shores across the Old Dominion. The maps and local fly pattern suggestions alone are worth its price."
- Lefty Kreh

As Virginia anglers, we are fortunate to have in our midst a dedicated cadre of sporting writers and photographers, their vocations and avocations constantly nourished by the bays, lakes, streams and creeks that ribbon the Commonwealth. Beau Beasley is one such writer. His *Fly Fishing Virginia* is a carefully researched, 'boots on the ground' fly fishing guide that covers over thirty-five of Virginia's top angling locations.

There is a wealth of information in this large-format, glossy volume. Five pages of full-color fly patterns highlight the most popular trout, bass and saltwater flies with which to ply the featured destinations. Many of these patterns are the spawn of some of Virginia's most talented fly artisans.

Though not a "how-to" book, Beasley does include a brief overview section covering: rules and regulations, safety, rod and reel basics, hiring a guide, and clubs and fishing organizations.

The real meat of the volume is found in the sections covering Virginia's waters. Three or more pages are devoted to each location. Every segment includes an easy-to-read map, a brief angling biography of the area, suggested flies and equipment, seasons and limits, local services, and accommodations. The format of map/text/sidebar makes for pleasant reading. What's more, the pages are packed to the gills with examples of colorful and inviting regional photography.

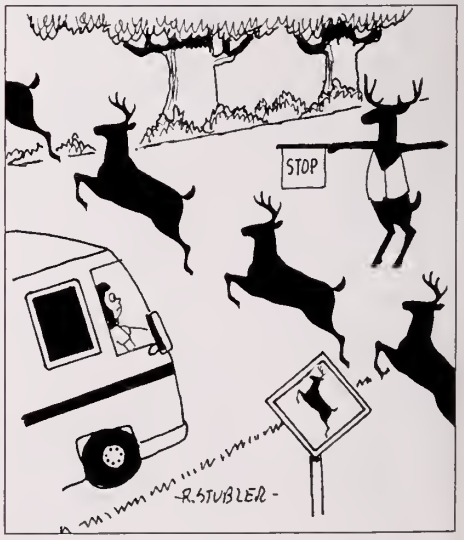
Fly Fishing Virginia: A No Nonsense Guide, is a perfect companion for the traveling angler; it's also valuable for those wishing to explore the habits of their home waters.

New Web Site for Waterfowl Enthusiasts

A new site, www.flyways.us, brings together the work of waterfowl managers and biologists from across North America. The site offers scientific data, harvest management information, and news/updates from the U.S. Fish and Wildlife Service (FWS) and Canadian Wildlife Service.

Short videos reporting results of the annual *Waterfowl Breeding Population and Habitat Survey* conducted by field biologists are also featured. In addition, users can view the aerial photos used to conduct the survey and query interactive maps to find out where birds were banded and recovered. Questions about duck, goose and swan hunting management in the U.S. can be submitted and will be answered by experts.

The new Web site was developed by the FWS through a collaborative effort, with focus on the Atlantic, Mississippi, Central and Pacific flyways.



Katilyn, age 3

Brooke, age 7

Jonathan, age 10

Congratulations to the first-place winner of each age category in the 2008 Kids 'n Fishing Photo Contest. All three winners received fishing-related prizes, thanks to Shakespeare and Green Top Sporting Goods who supported the competition. Take a moment and visit www.dgif.virginia.gov/kidsnfishing/ to see the other winning entries and stay up-to-date on next year's contest. Thanks to all who participated!

Virginia Wildlife Calendar

It's once again time to purchase a new Virginia Wildlife calendar. For more than 20 years the Department of Game and Inland Fisheries has been publishing one of the most visually stunning and informative wildlife calendars in the country.

The 2009 edition of the Virginia Wildlife calendar highlights many of the most sought after game and fish species in the state. Virginia hunters, anglers, and wildlife enthusiasts will appreciate the rich colors and composition of the 12 monthly photo spreads.

The calendar is full of useful tidbits for the outdoors lover—including wildlife behavior, preferred fishing and hunting times, hunting seasons, state fish records, and much more! Life history information is provided for each species featured.

Virginia Wildlife calendars make great holiday gifts and are still being offered at the bargain price of only $10 each.

Quantities are limited, so order yours now! Make your check payable to "Treasurer of Virginia" and send to: Virginia Wildlife Calendar, P.O. Box 11104, Richmond, Virginia 23230-1104. To pay by VISA or MasterCard, you can order the calendar online at www.HuntFishVA.com on our secure site. Please allow 4 to 6 weeks for delivery.

Virginia Wildlife Photo Contest Reminder

The deadline for submitting photographs for the 2008 *Virginia Wildlife* Photography Contest is November 3, 2008. Winning photographs will appear in the special March 2009 issue of *Virginia Wildlife* magazine. For more information, visit the Department's Web site at: **http://www.dgif.virginia.gov/events/photo-contest.pdf.**

Lifetime Licenses

Open the door to a lifetime of enjoyment in the great outdoors of Virginia with a lifetime freshwater fishing, hunting or trout license! It's an investment that keeps on giving.

For more information visit:

http://www.HuntFishVA.com/licenses/lifetime/

or call 1-(866) 721-6911

Attention Cooks

Grab Your Measuring Spoons!

The ever-popular recipe column that ran in this magazine for many, many years will be re-introduced with the January 2009 issue.

Renovations at Coursey Springs

Investing in the Future

"Before"

"After"

by Larry Mohn
and Ron Southwick

Trout fishing has long been a favorite pastime of Virginia sportsmen. Of the more than 150,000 anglers drawn to the sport, the majority target our stocked trout waters. Stocking catchable-sized trout into suitable mountain waters has been a focus of this agency since the late 1930s and one that is currently supported by five hatchery and rearing stations. These facilities are operated with funds generated by trout fishing licenses—an extra license required of anglers who are fishing designated, stocked trout waters.

The largest of our trout-rearing facilities is Coursey Springs, located in Bath County. The facility was constructed in the mid-1960s, utilizing one of Virginia's largest natural springs. The original hatchery had a simple design that employed a series of earthen raceways with gravity-fed water. Due to the large volume of water supplied by the spring, this particular rearing station has become Virginia's largest, producing about 30% of the agency's total trout.

A new facility under construction will look completely different from the way Coursey Springs appears today. Instead of a series of long raceways, the new design features large, circular tanks, which will be supplied with oxygen-enriched water capable of producing approximately 350,000 pounds of trout annually. In addition, the spring pond will benefit from a cover. This will block light penetration and prevent the growth of green plants, which consume oxygen at night. The cover will also serve to prevent predatory and migratory birds from using the spring pond as a roosting or resting place.

In addition to hatchery improvements, the fisheries division will renovate Pheasanty Run (also known as Spring Run) below the hatchery. Improvements will include stabilization of stream banks, added fish cover, and enhanced water flows. When completed, Pheasanty Run will provide a premium trout fishery for anglers to enjoy.

With Coursey Springs out of operation, there will be fewer trout available for stocking during the next two years. To ensure that all state trout waters continue to be stocked adequately, the fisheries division will reduce the number of stockings for each waterway. Waters that normally receive 8 stockings per year ("A" waters) will get 6 stockings during the renovation period. "B" waters will go from five to four stockings, and "C" waters, urban lakes, and delayed harvest streams will be stocked twice a year. Every effort will be made to eliminate those stockings during periods of light use.

A more detailed description of stocking changes can be found in the annual trout guide, which is included in the fishing regulations. Anglers will continue to see the same number of trout stocked per event as in the past, however.

On the positive side, trout anglers will enjoy several benefits from the reconstruction of Coursey Springs after the 2010 season. With a 30% increase in production capacity, you will experience a combination of more and bigger trout. The increase in production at Coursey also will allow the Department's other four trout stations to focus more on fish growth rather than numbers, so trout anglers statewide should see bigger and better trout in their creels.

The work at Coursey Springs is expected to be completed by December, 2009. During construction, the hatchery and the stream below the facility will be closed to public visitation. You are encouraged to enjoy any of the Department's other four trout hatcheries in Montebello, Paint Bank, Wytheville and Marion. Visiting hours are from 8 a.m. to 3 p.m. daily.

Photo Tips

by Lynda Richardson

Photograph Your Favorite Canine!

My favorite canine model is my dog, "FLASH." Whether he is leaping for a Frisbee, diving into the river after a stick, chasing a soccer ball, or sleeping calmly, which is rare, Flash offers me all the action and drama of any wildlife subject.

If you'd like a different and easily accessible challenge to build your photographic skills, I would recommend giving the family dog a shot. Here are some basic tips to get you started.

1) First of all, I taught FLASH loads of commands like "SIT, STAY, LOOK UP, STAND, UP-UP, and COME"! ("COME doesn't work that well for some reason.) This way I have a bit of control over him. And as back-up, there is always the leash.

2) Decide what kinds of photographs you want to capture: action, posed portraits, or grab shots. Pick a shooting location with minimal distractions.

3) Make sure you aren't going to lose your dog in the background of the photograph. A black or dark colored dog will disappear in a dark background just as a white dog will disappear in a snow bank or against a white sky. Make sure your background always complements and shows off your beautiful subject!

4) Early morning and late afternoon light is the most beautiful light to shoot in but if you have a dependable flash you can also shoot under harsher lighting conditions. A flash will not only fill in ugly shadows it will also add a highlight in the eyes.

5) Don't try to photograph your dog on a really hot or really cold day. Always have water available for both of you.

6) Bring an assistant! An extra set of hands can really make a difference if you want a dog to stay in a certain position or look directly at you. I have my assistant hold a favorite treat or toy right behind my head so I can get the dog to look right at me. If his eyes aren't directly on me I make a squeaky noise and that usually does the trick.

My very handsome boy dog and favorite model, "FLASH," poses with pumpkins, making for a colorful Halloween photograph. Notice that he even wore his own mask! What a good boy! ©*Lynda Richardson*

7) Get at eye level with your dog. Being on the same level offers a more personal portrait and is so much more appealing than looking down on your dog's head!

8) PATIENCE, PATIENCE, PATIENCE! Never try to photograph a dog when you're in a hurry. This will be a disaster. Pick a time when you have no deadlines and are feeling relaxed. Plan on working for no more than an hour. Don't push your dog too much. Dogs are very sensitive creatures; they know when you are upset with them and will become nervous, submissive, or unsure of what you want. The secret, as in working with wildlife subjects, is patience.

You are invited to submit one to five of your best photographs to "Image of the Month," Virginia Wildlife Magazine, P.O. Box 11104, 4010 West Broad Street, Richmond, VA 23230-1104. Send original slides, super high-quality prints, or high-res 360 dpi jpeg files on disk and include a self-addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where you captured the image and what camera and settings you used, along with your phone number. We look forward to seeing and sharing your work with the readers of *Virginia Wildlife*!

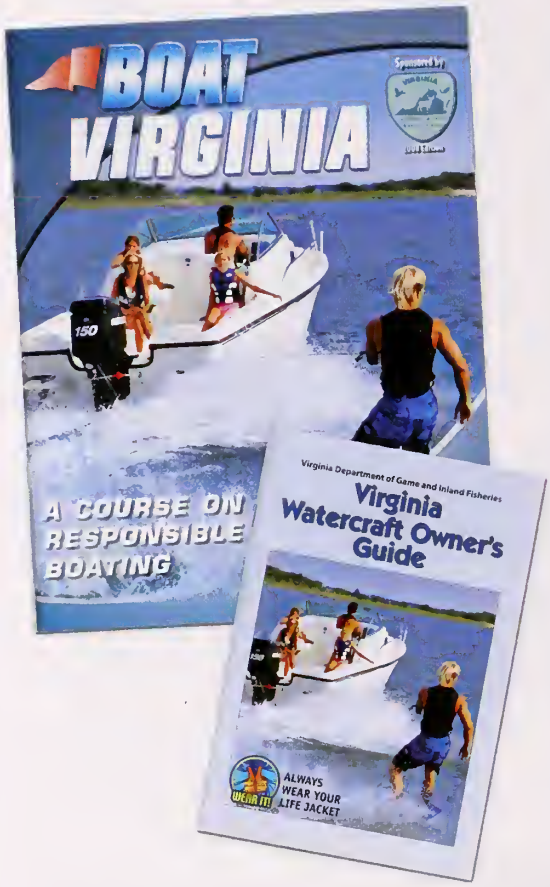
Image of the Month

Congratulations to Dirck Harris, of Reston, for his wonderful photograph of a Halloween pennant dragonfly. Dirck captured this close-up using a Nikon D70 digital camera and an 80-400mm Nikkor lens. Way to go Dirck!

On The Water

by Tom Guess

New Law Addresses Boating Safety



Since late June, I have been working as the boating safety education coordinator for the Department. This job follows on the heels of a career with the United States Coast Guard, from which I recently retired. My last assignment in the USCG was as the officer in charge of Station Milford Haven in Mathews County near Gwynn's Island.

I've spent quite a lot of time learning about the boating safety education law since my arrival here, and I want to use this first column to talk about aspects of the new law that are most important to you and your boating activities.

As a boater you are undoubtedly already dedicated to lifelong learning, since each trip underway becomes an educational adventure regardless of experience level. Whether you just started in boating or whether you are an "old salt" with thousands of hours on the water, you can't argue the fact that there is always something to learn.

You may know by now that the 2007 Session of the Virginia General Assembly enacted legislation to require boating safety education compliance. The Board of Game and Inland Fisheries has now adopted regulations to implement boating safety education, and the first compliance date is July 1, 2009 for personal watercraft (PWC) operators age 20 and younger. The phase-in schedule is important to understand, and as you can see, it will take about 8 years to fully implement this new law.

The complete schedule for safety education compliance follows:

- July 1, 2009: PWC operators 20 years of age and younger
- July 1, 2010: PWC operators 35 years of age or younger
- July 1, 2011: PWC operators 50 years of age or younger and motorboat operators 20 years of age or younger
- July 1, 2012: All personal watercraft operators, regardless of age, and motorboat operators 30 years of age or younger
- July 1, 2013: Motorboat operators 40 years of age or younger
- July 1, 2014: Motorboat operators 45 years of age or younger
- July 1, 2015: Motorboat operators 50 years of age or younger
- July 1, 2016: All motorboat operators, regardless of age

Another important point that I want to cover is *how* to come into compliance with the boating education requirement. There are a number of ways to do so. The first is to complete and pass a boating safety course approved by the National Association of State Boating Law Administrators (NASBLA) and accepted by DGIF. Our Department course, ***Boat Virginia***, is currently offered at no cost and is NASBLA-approved, as are classroom courses offered by the U.S. Coast Guard Auxiliary and the U.S. Power Squadrons. Also available are a number of Internet-based courses that are NASBLA-approved and accepted by the Department.

For the very experienced and knowledgeable boater, there is the option of taking and passing an equivalency or "challenge" exam. But unless you really know a lot about boating safety, this option is probably not the best way to try to satisfy the education requirement.

Additionally, boaters in possession of a valid license to operate a vessel issued to maritime personnel by the U.S. Coast Guard or a marine certificate issued by the Canadian government are already covered. The law includes a number of other provisions that allow for compliance, and they can be found in the *Virginia Watercraft Owner's Guide*.

For further information on the boating safety education requirement, please visit our Web site at www.dgif.virginia.gov.

Editor's Note: I'd like to extend our deep appreciation to Jim Crosby for the terrific job he performed preparing the safety information you've been reading in this column over the years. "On the Water" will take a break over the winter season and resume in the April, 2009 issue of the magazine.

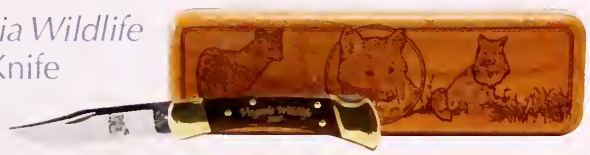
Virginia Wildlife Outdoor Catalog

2008 Limited Edition *Virginia Wildlife* Collector's Knife

Our 2008 Collector's knife has once again been customized by Buck Knives. The knife features a red-tailed hawk engraving, augmented by a natural woodgrain handle and gold lettering. A distinctive, solid cherry box features birds of prey.

Item # VW-408 $90.00 each (plus $7.25 S&H)

2007 *Virginia Wildlife* Collector's Knife



Customized by Buck Knives, this classic model 110 folding knife is 8 1/2" long when fully opened and has a distinctive, natural woodgrain handle with gold lettering. Each knife is individually serial numbered and has a mirror polished blade engraved with a fox. A solid cherry box engraved with foxes is included.

Item # VW-407 $90.00 each (plus $7.25 S&H)

2006 *Virginia Wildlife* Collector's Knife

Our 2006 Collector's knife has been customized by Buck Knives. Each knife is individually serial numbered, and comes with a distinctive rosewood handle and gold lettering. This year's knife of two white-tailed deer etched on the blade comes with a leather sheath and a custom cherry box with a wildlife scene engraved on the cover.

Item #VW-406 $85.00 each (plus $7.25 S&H)

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Video Game
Match wits against the king of upland game birds, the spring gobbler, and test your hunting skills with the magnificent white-tailed deer.

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Take a friend,

Make a Hunter

Virginia Apprentice Hunting License

The new apprentice hunting license serves as a first-time Virginia resident or nonresident hunting license and is good for 2 years.

The license holder must be accompanied and directly supervised by a mentor over 18 who has on his or her person a valid Virginia hunting license.

The apprentice license does not qualify the holder to purchase a regular hunting license, nor exempt the holder from compliance with Department regulations. A hunter education course must be successfully completed to obtain a regular hunting license.

A bear, deer, turkey license and all applicable stamps or permits are required in addition to the apprentice license.

Previous Virginia resident and nonresident hunting license holders may not use an apprentice license.

To learn more about the Virginia Apprentice Hunting License, call (866) 721-6911 or log on to www.HuntFishVA.com.

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